

AERO Design Ltd.  
2013 - 39<sup>th</sup> Ave. NE  
Calgary, AB, T2E 6R7

AUTHORIZED RELEASE CERTIFICATE

TRANSPORT CANADA  
TCCA 24-0078  
AMF # 73-04

Product: Cargo Basket Opening Retro-Fit Kit Part #: 70401-01  
Approval #: SH00-48 Serial #: \_\_\_\_\_  
WO #: 2006-16 Quantity: 1  
Eligibility: Bell 206L / 407 Work Status: Manufactured  
Remarks: Install per SI 704.01

*I hereby certify that the product identified above has been manufactured in accordance with the applicable design data and the Canadian Aviation Regulations or applicable foreign regulations.*

12 DEC. 06  
Date

S. FATEP  
Inspector's Signature

WORK ORDER 2006-16

Date opened: 12 December 2006

Project: Cargo Basket Opening Retro-Fit  
Type: Bell 206L / 407

Batch Quantity: 1 set

Approval: SH00-48  
Drawing List: DCL 704

Fabrication and Assembly Drawing(s)	Description
70401 & sub.	

Complete material tracking information on attached pages.

Work Order pre-completion Inspection:

Project is on Approval Limitation Record:  
Document Control List revision level matches (or exceeds) STC:  
Drawings revision levels match Document Control List:

Y ✓  
Y ✓  
Y ✓

Purchase order or Work order source is recorded for each part/ass'y:  
Tests and inspections specifically called out on drawings are complete:  
Release tags associated with all fabricated parts are attached:  
All mounting hardware and supplies are included:

Y ✓  
Y ✓  
Y ✓  
Y ✓

List all non-conformities raised: \_\_\_\_\_

S. FATHY  
Inspector Signature: \_\_\_\_\_

12 DEC 06  
Date: \_\_\_\_\_

Drawing: 70401 Revision 0  
Assembly: 70401-01

Qty	Part #	Description	Material	P.O./W.O.	Checked
1	70401-03	Tube		6026	STF
1	70401-04	Tube		6026	STF
1	3/4-16F	Mesh		6007	STF
2	ER70S-2	1/16" Welding Rod		6037	STF
24	CR3213-4-02	Rivet		6035	STF

Processes	Per	Mat'ls Used	Inspection	Signature
INSP - PRE-INSTALLATION				STF

Tag incomplete parts with Work Order # when stored between processes.

Tag complete parts / assemblies with Release Tag prior to storage.

**AERO Design Ltd.**

**SERVICE INSTRUCTION**

**SI 704.01**

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**EXTERNAL CARGO BASKET**

**FORWARD END OPENING RETRO-FIT**

Prepared by: E. Burgoin, P.Eng., DAR 290M

Revision 0, 12 December, 2006

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AERO Design Ltd.  
*Engineering Consultants*

2013 – 39<sup>th</sup> Avenue N.E., Calgary, Alberta T2E 6R7

Phone: (403) 250-8027

Fax: (403) 250-8333

[www.aerodesign.ca](http://www.aerodesign.ca)

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## 1.0 PREPARATION

- 1) Remove Cargo Basket Assembly, part no. 49205-01 from forward and aft support beams. Stow attachment hardware.
- 2) Disconnect Lid Brace Assembly, part no. 36280-01, from Cargo Basket Body sub-assembly, part no. 49208-01. Stow attachment hardware.
- 3) Remove Cargo Basket Lid sub-Assembly, part no. 49207-01 by removing CR3213-4-02 rivets securing hinge to basket.
- 4) Strip powder coating from Cargo Basket Body sub-assembly, part no. 49208-01 and sand blast to facilitate welding and re-coating.

Note: This is best done by a service company providing powder coating services.

## 2.0 MODIFICATION

- 5) Position ½" square tubing, part no. 70401-03 and 70401-04 into forward hoop of basket as shown on drawing 70401 and determine where the tubing and mesh needs to be cut. Tubing has been left long to facilitate cutting the mesh along intersections in mesh as shown on drawing 70401. Mark cut line on tubing with felt marker. Mark cut line on mesh with felt marker.
- 6) Cut ends of ½" tubing as marked in 5) above.
- 7) Cut mesh on front end of basket through intersections as marked in 5) above.
- 8) Grind welds securing mesh on front end of basket to forward hoop to free the mesh locally where ½" square tubing, part no. 70401-03 and 70401-04 are to be welded to forward hoop of the Cargo Basket Body sub-assembly, part no. 49208-01. Grind off only as many welds as required to gain access for welding. Bend mesh out of the way only enough to facilitate welding. Remove any excess weld material remaining on the ½" square tube.

- Note:
- a) If mesh is damaged during this process, it must be replaced.
  - b) When grinding welds securing mesh, take care not to grind into ½" tube material.

- 9) Weld in ½" square tubing, part no. 70401-03 and 70401-04 as shown on drawing 70401.

- Note:
- c) Welding to be completed by GTAW method to AMS 2685C by Transport Canada approved welding facility.

- 10) Bend mesh on front end of basket back into position. Weld intersections of mesh to ½" square tubing – all locations.
- 11) Dress out any sharp edges remaining at weld locations

### 3.0 RE-ASSEMBLY

- 12) Powder coat Cargo Basket Body sub-assembly, part no. 49208-01 (original colour "sky white").
- 13) Re-install Cargo Basket Lid sub-Assembly, part no. 49207-01 using CR3213-4-02 rivets provided.
- 14) Re-connect Lid Brace Assembly, part no. 36280-01, to Cargo Basket Body sub-assembly, part no. 49208-01 using existing hardware.
- 15) Attach completed Cargo Basket Assembly, part no. 49205-01 to forward and rear support beams using existing hardware.

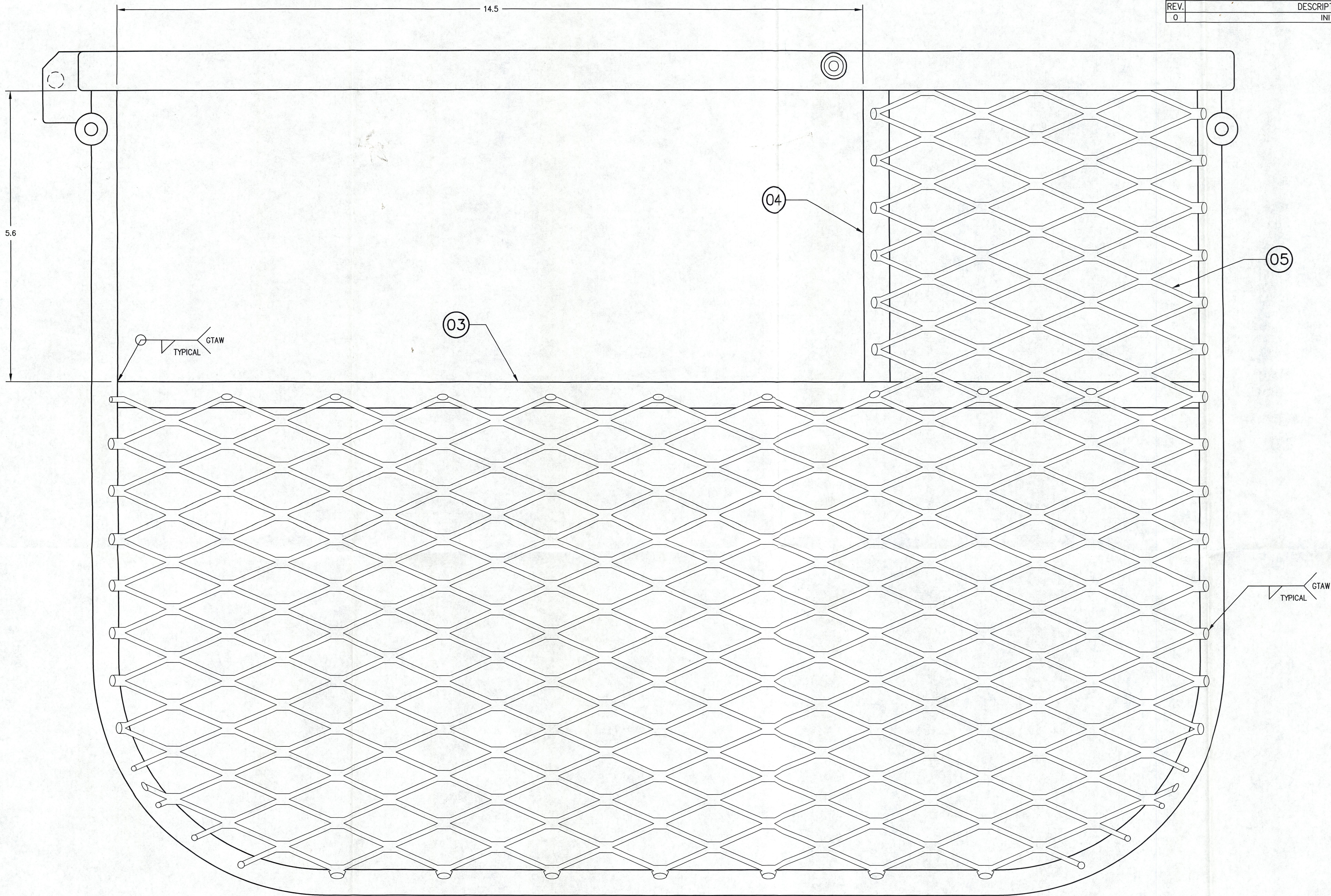
### 4.0 MODIFICATION PARTS LIST

- a) Drawing 70401, Modification drawing
- b) Part no. 70401-03, ½" square tube - 1 piece
- c) Part no. 70401-04, ½" square tube - 1 piece
- d) Part no. 70401-05, mesh – forward end - 1 piece (replacement if required)
- e) ER70S-2, weld rod - 2 length 1/16" diameter
- f) CR3213-4-02, rivets - 25 req'd



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REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		



01 BASKET BODY ASSEMBLY

LOOKING AT FORWARD END

NOTES

- THIS DRAWING IS AN OPTIONAL CONFIGURATION FOR THE FORWARD END ONLY. REMAINDER OF BASKET IS TO BE IN ACCORDANCE WITH DRAWING 49208.
- REMOVE ALL BURRS AND BREAK SHARP EDGES
- WELDING OF 4130 STEEL TO BE COMPLETED BY GTAW METHOD TO AMS 2685C. WELDING ROD SHALL CONFORM TO ER70S-2 OR EQUIVALENT.
- WHEN ASSEMBLY IS COMPLETE, FILL ALL VENT HOLES WITH ROSETTE WELD.
- THOROUGHLY CLEAN AND POWDER COAT BASKET SUB-ASSEMBLIES SKY WHITE PRIOR TO ASSEMBLY.

QTY	PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE
1	3/4-16F	05	MESH	MILD STEEL	COMMERCIAL	
1	70401-04	04	TUBE	4130 STEEL COND. N	MIL-T-6736	0.5 X 0.035 WALL TUBE
1	70401-03	03	TUBE	4130 STEEL COND. N	MIL-T-6736	0.5 X 0.035 WALL TUBE
1	49208-01	02	BASKET BODY ASSEMBLY			
1	70401-01	01	BASKET BODY ASSEMBLY - MODIFIED FORWARD END			
QTY						

LIST OF MATERIALS

APPROVALS	DATE	AERO DESIGN LTD.			
DRAWN: JEFF CLARKE	27 JAN 2006	CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M 2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7 tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net			
CHECKED: E. BURGOIN		BELL 206L SERIES AND 407 CARGO BASKET OPEN FORWARD END MODIFICATION			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS X.XXX ±0.010 X.XX ±0.03 X.X ±0.1		ANGLES ±1/2°		SCALE 1 : 1	DWG. NO.
				SHEET 1 OF 1	REV.
		A1		70401	0